

CLAIMS

1. A graft copolymer composition characterized by a mixture of

[1] a graft copolymer (A),

(i) containing a rubbery polymer (a') at a ratio of from 50 to 90% by weight obtained by polymerizing a monomers mixture (a) comprising from 50 to 100% by weight of a monomer (a-1) constituted of at least one of a butadiene monomer and an alkyl ester of acrylic acid monomer, from 0 to 50% by weight of an aromatic vinyl monomer (a-2), from 0 to 20% by weight of a vinyl monomer (a-3) copolymerizable with the monomer (a-1) and the monomer (a-2), and from 0 to 5% by weight of a non-conjugated multifunctional monomer (a-4); and having a glass transition temperature of not higher than 0°C;

(ii) containing polymer (b') at a ratio of from 10 to 50% by weight obtained by polymerizing monomers mixture (b) comprising from 10 to 100% weight of a alkyl ester of methacrylic acid monomer (b-1), from 0 to 60% by weight of an alkyl ester of acrylic acid monomer (b-2), from 0 to 90% by weight of an aromatic monomer (b-3), from 0 to 25% by weight of a vinyl cyanide monomer (b-4), and from 0 to 20% by weight of a vinyl monomer (b-5) copolymerizable with the monomer (b-3) and the monomer (b-4); (wherein, the sum total of the rubbery polymer (a') and the polymer (b') is 100% by weight); and

(iii) having a mean particle size of at least 0.15 μm ;
said graft copolymer (A) being obtained by graft
copolymerizing the monomer mixture (b) to the rubbery polymer
(a') as the trunk polymer, and

[2] a graft copolymer (B),

(i) containing the above-described rubbery polymer
(a') at a ratio of from 50 to 90% by weight;

(ii) containing the above-described polymer (b') at a
ratio of from 10 to 50% by weight (wherein, the sum total of
the rubbery polymer (a') and the polymer (b') is 100% by
weight), and

(iii) having a mean particle size of from 0.03 to
0.13 μm ;

said graft copolymer (B) being obtained by graft
copolymerizing the monomer mixture (b) to the rubbery polymer
(a') as the trunk polymer; wherein

the graft copolymer (A) occupies at least 5% by weight and
less than 50% by weight of the sum total amounts of the graft
copolymer (A) and the graft copolymer (B).

2. The graft copolymer composition according to claim
1, wherein the graft copolymer (A) occupies from 10 to 40%
by weight of the sum total amounts of the graft copolymer (A)
and the graft copolymer (B).

3. The graft copolymer composition according to claim 2, wherein the graft copolymer (A) occupies from 15 to 35% by weight of the sum total amounts of the graft copolymer (A) and the graft copolymer (B).

4. The graft copolymer composition according to claim 1, wherein the mean particle size of the graft copolymer (A) is from 0.16 to 0.5 μm .

5. The graft copolymer composition according to claim 4, wherein the mean particle size of the graft copolymer (A) is from 0.17 to 0.28 μm .

6. The graft copolymer composition according to claim 1, wherein the mean particle size of the graft copolymer (B) is from 0.05 to 0.12 μm .

7. The graft copolymer composition according to claim 1, wherein the monomer (a-1) is constituted of from 0 to 25% by weight of a butadiene monomer and from 75 to 100% by weight of an alkyl ester of acrylic acid monomer (wherein the sum total of both the monomers is 100% by weight).

8. The graft copolymer composition according to claim 7, wherein the monomer (a-1) is constituted of the alkyl ester of acrylic acid monomer only.

9. The graft copolymer composition according to claim 1, wherein the monomer mixture (a) does not contain the aromatic vinyl monomer (a-2).

10. The graft copolymer composition according to claim 1, wherein the monomer mixture (a) does not contain the vinyl monomer (a-3).

11. The graft copolymer composition according to claim 1, wherein the ratio of the non-conjugated multifunctional monomer (a-4) contained in the monomer mixture (a) is from 0.1 to 3% by weight.

12. The graft copolymer composition according to claim 1, wherein the alkyl ester of methacrylic acid monomer (b-1) contains a methyl methacrylate monomer at a ratio of from 60 to 100% by weight.

13. The graft copolymer composition according to claim 12, wherein the alkyl ester of methacrylic acid monomer (b-1) contains a methyl methacrylate monomer at a ratio of from 80 to 100% by weight.

14. The graft copolymer composition according to claim 1, wherein the monomer mixture (b) contains methyl

methacrylate monomer (b-1) and the alkyl ester of acrylic acid monomer (b-2) at a ratio of from 60 to 100% by weight and at a ratio of from 0 to 40% by weight, respectively.

15. The graft copolymer composition according to claim 1, wherein the monomer mixture (b) contains the aromatic vinyl monomer (b-3) at a ratio of from 0 to 10% by weight.

16. The graft copolymer composition according to claim 15, wherein the monomer mixture (b) does not contain the aromatic vinyl monomer (b-3).

17. The graft copolymer composition according to claim 1, wherein the monomer mixture (b) does not contain the vinyl cyanide monomer (b-4).

18. The graft copolymer composition according to claim 1, wherein the monomer mixture (b) does not contain the vinyl monomer (b-5).

19. A vinyl chloride-base composition characterized by obtained by mixing from 1 to 30% by weight of the graft copolymer composition described in above-described 1 and from 99 to 70% by weight of a vinyl chloride-base resin composition (C) (wherein, the sum total of both the compositions is 100% by weight).

20. A molded material obtained by molding the vinyl chloride-base resin composition described in above-described 19.